

In the Claims

Claims 1 - 29 (Cancelled)

30. (New) A process for secured distribution of video sequences according to a digital stream format stemming from an encoding based on a processing by wavelets comprising frames comprising blocks containing coefficients of wavelets describing the visual elements, comprising:

analyzing the stream prior to transmission to client equipment to generate a modified main stream by deletion and replacement of selected information coding the original stream and having the format of the original stream, and complementary information of any format comprising the digital information coding the original stream and suitable for permitting reconstruction of the modified frames; and

transmitting the modified main stream and the complementary information separately from a server to addressed equipment.

31. (New) The process according to claim 30, wherein the scrambling comprises modifying coefficients of wavelets belonging to at least one temporal subband resulting from temporal analysis.

32. (New) The process according to claim 30, wherein the scrambling comprises modifying the wavelet coefficients belonging to at least one spatial subband resulting from spatial analysis of a temporal subband.

33. (New) The process according to claim 30, wherein the scrambling comprises modifying coefficients of wavelets belonging to at least one temporal subband resulting from temporal analysis of one spatial subband.

34. (New) The process according to claim 30, wherein the wavelet coefficients to be modified are randomly selected and/or defined a priori.

35. (New) The process according to claim 30, wherein parameters for the scrambling are a function of properties of temporal scalability and/or spatial scalability and/or qualitative scalability and/or temporal scalability, transmission rate scalability and/or scalability by regions of interest offered by digital streams generated by wavelet-based coders.

36. (New) The process according to claim 30, wherein visual intensity of degradation of the video sequences is determined by a quantity of modified wavelet coefficients in each spatial-temporal subband.

37. (New) The process according to claim 30, wherein intensity of visual degradation of the video sequences decoded from the modified main stream is a function of a position in the original digital stream of the modified data, which data represents, according to its positions, values quantified according to different accuracies of wavelet coefficients belonging to a spatial-temporal subband.

38. (New) The process according to claim 30, wherein intensity of visual degradation of the video sequences decoded from the modified main stream is determined according to which quality layer of modified wavelet coefficients they belong to in each spatial-temporal subband.

39. (New) The process according to claim 30, wherein modification of wavelet coefficients is carried out directly in a binary stream.

40. (New) The process according to claim 30, wherein modification of wavelet coefficients is carried out with a partial decoding.

41. (New) The process according to claim 30, wherein modification of wavelet coefficients is carried out during coding or by carrying out a decoding then a complete re-encoding.

42. (New) The process according to claim 30, wherein size of the modified main stream is strictly identical to the size of the original digital video stream.

43. (New) The process according to claim 30, wherein substitution of the wavelet coefficients is carried out with random or calculated values.

44. (New) The process according to claim 30, wherein duration of visual scrambling obtained in a group of frames is determined as a function of a temporal subband to which modified wavelet coefficients belong.

45. (New) The process according to claim 30, wherein visual scrambling obtained in a group of frames is limited spatially in a region of interest of each frame.

46. (New) The process according to claim 30, wherein the complementary information is organized in layers of temporal and/or spatial and/or qualitative and/or transmission rate scalability and/or scalability by region of interest.

47. (New) The process according to claim 30, wherein the stream is progressively descrambled with different levels of quality and/or resolution and/or frame rate and/or according to a region of interest via sending a part of the complementary information corresponding to layers of qualitative and/or spatial and/or temporal scalability and/or scalability for a region of interest.

48. (New) The process according to claim 30, wherein the stream is partially descrambled according to different levels of quality and/or resolution and/or frame rate and/or according to a region of interest via sending a part of the complementary information corresponding to a layer or layers of qualitative and/or spatial and/or temporal scalability and/or scalability for this region of interest.

49. (New) The process according to claim 30, wherein a synthesis of a digital stream in an original format is calculated in addressed equipment as a function of the modified main stream and the complementary information.

50. (New) The process according to claim 30, wherein transmission of the modified main stream is realized via a physically distributed material support.

51. (New) The process according to claim 30, wherein the modified main stream undergoes operations of transcoding, rearrangement and/or extraction of frames or groups of frames during transmission.

52. (New) The process according to claim 30, wherein transmission of the complementary information is realized via a physically distributed support material.

53. (New) The process according to claim 30, wherein modification of wavelet coefficients is reversible and a digital stream reconstituted from the modified main stream and from the complementary information is identical to the original stream.

54. (New) The process according to claim 30, wherein modification of wavelet coefficients is reversible and a portion of the digital stream reconstituted from the modified main stream and from the complementary information is identical to a corresponding portion in the original stream.

55. (New) The process according to claim 53, wherein reconstitution of a descrambled video stream is controlled and/or limited in terms of predefined frame rate and/or resolution and/or transmission rate and/or quality as a function of rights of a user.

56. (New) The process according to claim 54, wherein reconstitution of a descrambled video stream is controlled and/or limited in terms of predefined frame rate and/or resolution and/or transmission rate and/or quality as a function of rights of a user.

57. (New) The process according to claim 53, wherein reconstitution of a descrambled video stream is controlled and/or limited in terms of predefined frame rate and/or resolution and/or transmission rate and/or quality as a function of viewing apparatus on which it is visualized.

58. (New) The process according to claim 54, wherein reconstitution of a descrambled video stream is controlled and/or limited in terms of predefined frame rate and/or resolution and/or transmission rate and/or quality as a function of viewing apparatus on which it is visualized.

59. (New) The process according to claim 53, wherein reconstitution of a descrambled video stream is carried out in a progressive manner in stages under reconstitution of the original video stream is achieved.

60. (New) The process according to claim 54, wherein reconstitution of a descrambled video stream is carried out in a progressive manner in stages under reconstitution of the original video stream is achieved.

61. (New) A system for fabricating a video stream that runs the process according to claim 30, comprising:

at least one multimedia server containing original video sequences;

a device for analyzing the video stream;

a device for separating the original video stream into a modified main stream by deletion and replacement of selected information coding the original visual signal and into complementary information as a function of this analysis; and

at least one device in addressed equipment for reconstruction of the video stream as a function of the modified main stream and the complementary information.